CHAPTER 6 CONCLUSION

Based on the research that has been done, this chapter discusses the conclusions of the research based on the analysis and implementation. The conclusions obtained from this research are:

- 1. Prototype Smart Trash Separation System that separates organic and Inorganic waste using Internet of Things functions properly as expected.
- 2. The sorting of organic and inorganic waste from 20 datasets with 4 fails using the LDR sensor has an accuracy rate of 80%.
- The fuzzy algorithm that has been applied to the smart trash monitoring website has successfully calculated the current status of the waste capacity. The current status of the garbage capacity is useful for helping the garbage cleaning process.

The design of this prototype is still lacking where the LDR sensor still has a long response time in reading low light areas. Suggestions for further research are that LDR sensors can be further optimized in terms of systems and tools so that the response time of sensors in reading light conditions can be optimized and faster. In addition, further research can add sensors to detect metallic waste.